

INFORMATION SHEET

ORDER NO.
WEIMAR INSTITUTE, INC.
WASTEWATER TREATMENT FACILITY
PLACER COUNTY

Background

Weimar Institute, Inc. currently owns and operates a wastewater treatment facility (WWTF) located approximately 10 miles east of City of Auburn adjacent to Interstate 80 in Weimar. The WWTF currently serves a population of approximately 224 persons and treats a monthly average flow of approximately 22,400 gallons per day (gpd) of domestic wastewater. The WWTF contains an Imhoff tank, trickling filter, three wastewater oxidation ponds, and subsurface disposal via two leachfields. The collection system consists of two gravity collection systems (Campus Collection System Branch, and the Academy Center and Residential Duplexes Collection System Branch). The Campus Collection System Branch consists of approximately 8,000 feet of various sections of clay tile, Orangeburg, cast iron, asbestos cement, and plastic pipe materials ranging in size from four to eight inches. Two and three inch diameter pipe may also be found between some of the buildings and the collection system. Since 1983, between 800 and 1,600 feet of this sewer line has been replaced with SDR35 PVC sewer pipe. The Academy Center and three Residential Duplexes are served by 4-inch SDR35 PVC sewer pipe that was installed in 1983.

Wastewater from the Campus Collection System Branch flows into an Imhoff tank. The Imhoff tank consists of a large rectangular concrete tank with a sloping center baffle that provides primary sewage treatment by separating the solids from the liquid. A dosing chamber, attached to the discharge end of the Imhoff tank, receives 600-gallon doses that are measured using an electronic counter. Effluent from the dosing chamber enters the trickling filter where it receives biological treatment prior to being diverted to either Pond Nos. 1 or 2. The wastewater from the Academy Center and Residential Duplexes Collection System Branch enters a series of four septic tanks prior to being discharged to Pond No. 1. Wastewater from this system, which is approximately 10 percent of the total flow, does not enter the Imhoff tank or the trickling filter, and is not metered. This Order requires the Discharger to also meter wastewater flows from the Academy Center and Residential Duplexes Collection System Branch.

The effluent disposal system consists of three wastewater storage ponds with a total capacity of approximately 6.7 million gallons at 2-feet of freeboard, and the upper and lower leachfields. Wastewater levels between Pond Nos. 1 and 2 are controlled via an overflow weir and pipe assembly. A flow splitter and effluent distribution-piping manifold is used to allow simultaneous effluent distribution to the ponds. Two separate pump houses are located at the facility. The Pond No. 1 Pump House is near the southeast corner of Pond No. 1 and contains a single pump used to draw effluent from Pond No. 1 for the spray aerator in Pond No. 1 or the trickling filter. In addition, the pump may also be used to pump effluent into Pond Nos. 2 and 3. The Pond No. 2 Pump House is south of Pond No. 3 and is equipped with two pumps with timer controls, two different filtration methods (screened and centrifugal spin), and a valve system that allows the effluent to be pumped back to Pond Nos. 1, 2 and/or 3, or to either the upper or lower leachfields.

The upper leachfield is comprised of 1,950 feet of leachline and the lower leachfield consists of 1,500 feet of leachline. Each of the leachfields were constructed with 4-inch diameter perforated pipe in a three

foot wide by three foot deep trench with 18-inches of gravel underlying the pipe. Both of the leachfields are equipped with observation risers to monitor the level of wastewater in each of the trenches. Wastewater is currently distributed to the upper and lower leachfields via gravity; however, the Discharger has plans to upgrade to a uniform pressure dosed system. The upper leachfield provides approximately 2.10 gpd/square feet of infiltration while the lower leachfield provides approximately 4.44 gpd/square feet of infiltration. The existing upper leach lines have a disposal capacity of up to 12,285 gpd and the lower leachlines can dispose up to 20,000 gpd.

This Order allows for the monthly average dry weather inflow to the WWTP to not exceed 22,500 gpd. However, if the Discharger wishes to increase the average monthly dry weather flow to 30,000 gallons, then the Discharger shall submit a technical report required by Provision G.1.m of the Order. Upon approval by the Executive Officer, the discharge may increase to 30,000 gpd.

This Order also requires the Discharger to: (a) provide a technical report that documents improvements to the collection and wastewater treatment system; (b) submit a workplan with a schedule to inspect and map 1,000 feet of collection system each year considering that at least 500 feet of deteriorated sewer pipe shall be replaced each year; (c) submit a workplan that describes the upgrade to the upper and lower leachfields from sequential gravity distribution to uniform pressure dose; (d) provide documentation showing that a remotely operated alarm system has been installed at locations within each of the two gravity collection systems; (e) install groundwater monitoring wells around the wastewater ponds, the upper leachfield and the lower leachfield to adequately characterize the groundwater quality upgradient and downgradient of the wastewater ponds and leachfield; (f) provide a Sanitary Sewer System Operation, Maintenance, Overflow Prevention, and Response Plan, and a Revised Operations and Maintenance Plan; (g) submit a Background Groundwater Quality Study Report and a Sludge Management Plan; and (h) if the Discharger wishes to increase the monthly average inflows to the WWTF, a technical report that demonstrates how the leachline expansion will ensure adequate treatment and disposal for an average dry weather inflow not exceeding 30,000 gpd.

The Discharger shall also perform septic tank, influent, effluent, pond, leachfield and groundwater monitoring, and submit monthly reports as required by the Monitoring and Reporting Program (MRP). Groundwater monitoring and reporting is required on a quarterly basis. Finally, the Discharger is required to submit annual reports according to requirements of the MRP. In particular, the annual reports shall provide a summary of the inspections, repair activities, and pipeline replacements which were performed on the effluent collection system during the previous year.

The Regional Board finds that the Discharger has not demonstrated that if it is to the maximum benefit to the people of the State of California to degrade groundwater, and therefore groundwater degradation is not allowed under this Order.

Surface water drainage from the Weimar Institute Wastewater Treatment Facility is to Coyote Creek, a tributary to Wolley Creek and Lake Combie.